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ABSTRACT

Considerable effort has been devoted to investigating various aspects of love and affection, but there have been few studies about direct expressions of affection. Relationships between gender composition of a dyad and the affection/aggression expressed by the dyad were examined as was the possibility of increasing the amount of affectionate responding in dyads for two groups of college students. For the first study (N=108 students), results indicated that male-male dyads were significantly less affectionate than female-female or male-female dyads. Results of the second study (N=66 students) indicated that participants exposed to a film depicting tragic death were significantly more affectionate than the control group subjects. Sex differences were found in relationships between affectionate responding and aggressive responding as well as responses made after the receipt of affection or aggression. The findings suggest that the strengthening of affectionate bonds among people may lead to a decline of aggressive expression among these individuals. (Author/JAC)

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Explorations of Affection and Aggression

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Explorations of Affection and Aggression

The theoretical writings of many psychologists reflect a belief that love plays a very important role in the lives of human beings. While this point may be obvious, it is interesting to note the divergence of perspectives represented by those espousing this notion and the extent to which some writers have gone in discussing the importance of love. Freud (1926) considered the threat of the loss of another's love or the loss of the superego's love important in understanding anxiety. Maslow (1954 pg.347) suggests that ". . . . the deprivation of love leads to illness" and Fromm (1955, pg.33) proposed that "In the experience of love lies the only answer to being human, lies sanity".

Many writers consider affection to be similar to love or a component of love and stress its importance also. Rotter, from a social learning point of view, includes "Love and Affection" among six broad categories of human needs (Rotter, et al.,1972 pg.32). Bowlby (1980, p.39) writes that "attachment behavior leads to the development of important affectional bonds," and stresses that attachment behavior is "distinct from feeding behavior and sexual behavior and of at least an equal significance in human life " [italics added].

Considerable effort has been devoted to investigating various aspects of love and affection, including studies of romantic love, interpersonal attraction and friendship formation (Rubin 1970, Byrne 1971, Festinger et al 1950). Also, a few correlational studies have focused specifically on affectionate behavior (e.g. Fiore and Swensen 1977, Martin et.al., 1976). However, there have been few experimental investigations of direct expressions of affection and those that have been reported have tended to focus on the modeling of affection in children (Karst 1967, Fryrear and Thelen 1969, Acker et.al., 1973). From an empirical standpoint then, we know little about variables that are related to increases or decreases in direct expressions of affection in mature populations. One purpose of the present research was to examine relationships between certain situational and organismic variables and the direct expression of affection in college students.

In designing a methodology to study affectionate behavior, the present author accomodated his interest in aggressive behavior by attempting to construct a paradigm which would enable one to simultaneously study affectionate and aggressive responses. Drawing heavily on the Taylor (1967) and Buss (1961) aggression situations, a procedure was developed that allowed for an interaction

between two individuals who had at their disposal both verbally affectionate and verbally aggressive responses [1]. It was felt that such a procedure would not only have the advantage of permitting aggression and affection to be examined in one study, but also would allow the research participant a greater number of behavioral alternatives than is typically present in laboratory investigations of aggressive behavior.

Development of Paradigm

Fifty-six sentences were presented to 90 undergraduate males and females. The students were provided with the following definitions of verbal affection, verbal aggression and verbal neutrality:

Affectionate: This type of statement when said to another person will tend to make the other person feel pleasant. The person hearing this statements said to him/her is likely to feel happy, cared for, complimented or a combination of these. The person hearing the statement is likely to feel that the person saying the statement feels positively toward her/him and is trying to convey this feeling.

Aggressive: This type of statement when said to another person will tend to make the other person feel unpleasant. The person hearing this statement said to him/her is likely to feel angry, rejected, insulted or a combination of these. The person hearing the statement is likely to feel that the person saying the statement feels negatively toward her/him and is trying to convey this feeling.

Neutral: This type of statement when said to another person will tend to make the other person feel neither good nor bad. The person hearing the statement is not likely to feel that the person saying the statement feels either positively or negatively toward him/her.

The students were asked to make two evaluations concerning each statement. The first evaluation involved judging the statement with reference to type; whether the statement was affectionate, aggressive or neutral. The second evaluation involved rating the intensity of the statements on a seven-point Likert-type scale. (Intensity ratings were appropriate for the aggressive and affectionate statements only.) On the basis of these ratings, two 15-statement lists (A and B) were constructed. Each list contained five affectionate, five aggressive and five neutral statements. The aggressive statements on List A had been rated significantly different from one another and were arranged in an order of increasing intensity. The same was true of the aggressive statements that appeared on List B. Additionally, the intensity ratings for the aggressive statements on List A were very similar to the ratings of respective statements on List B. The affectionate statements were also ordered along an intensity dimension on each of the lists. As was the case with the aggressive statements, these statements were rated significantly different from one another within each list and the respective cross-list ratings were very comparable. The statements and associated ratings are presented in Table I.

Insert Table I about here

There was an attempt to determine reliability and validity indices for the statements. The thirty statements comprising List A and List B were administered to another group of 29 undergraduates with similar instructions. Three weeks later these same undergraduates rated the statements a second time. Reliability estimates in terms of the ratings of the type of statement were quite high with agreement percentages ranging from 82.8% to 100% with a mean of 96% and a median of 96.6%. Thus, reliability estimates of the type of statement ratings were quite acceptable. Traditionally, estimates of reliability (Spearman-Brown method) of the intensity ratings proved to be disappointing, ranging from the .20's to the .60's with a mean of .50. However, in the actual experiment each statement was to be labeled with a specific numeric value, which was to refer to the statement's intensity level. Therefore, it was felt that if there were reasonable agreement between the first and second intensity ratings, the statement would be acceptable. It was decided that if the second intensity rating was within one point (higher or lower on the seven point scale) of the first, in a relatively high percentage of cases, this statement would be acceptable. For the 20 statements (10 affectionate and 10 aggressive) that were rated as to their intensity [2] these precentages ranged from 62.1% to 96.6% with a mean of 76.3% and a median of 81.1%. These precentages were considered acceptable in light of the fact that each

statement was to have a specific intensity label in the actual experiment [3].

There was almost unanimous agreement among the raters as to which statements were "affectionate", "neutral" and "aggressive". Thus, in terms of affective content, the 10 "affectionate" statements were valid expressions of affection in the sense that they had face validity. There were two other attempts to assess the validity of the statements. One attempt involved asking 53 college students to imagine being in an experiment where they were asked to communicate with another person by exchanging messages. The students were told the content of the messages that they received from the other person during this imaginary experiment. For one-third of the students the messages were statements that had been previously rated as "affectionate". For another third the messages had been previously rated as "neutral" and for the final third the messages were "aggressive". The students were then asked to rate the imaginary person along several personality dimensions. Analyses of these ratings indicated that those receiving "affectionate" statements rated the imaginary person as significantly more "affectionate" and "warm" than those "receiving" statements that were "neutral" or "aggressive". Also, those students receiving statements previously rated as "aggressive" rated the imaginary person as significantly more "aggressive" and "hostile" than those receivng the other types of statements. The second attempt to assess the validity of the affective content of the statements involved an actual laboratory experiment. This attempt utilized a procedure nearly identical to

the one used in two studies that are discussed later. The basic strategy of this validity study was to have participants come into the laboratory situation and receive various kinds of messages from a trained confederate. Half of the participants were to receive affectionate and neutral messages while the other half were to receive aggressive and neutral messages. The participants were then to rate the confederate on various dimensions including those delimited by the adjectives Hostile, Affectionate, Violent-prone, Warm, Harmful and Pleasant. It was felt that if the participants who experienced an affectionate confederate rated him/her as more affectionate, warm and pleasant than whose participants who faced an aggressive confederate, then the validity of the affectionate statements and also this methodology for studying affection would be supported. Likewise, if there were differential ratings on the dimension of hositility, violence-proneness and harmfulness as a function of exposure to aggressive and non-aggressive confederates, then the validity of the aggressive statements and this methodology for studying aggression would be supported. The affectionate, neutral and aggressive statements used by the real participant were also monitored. It was felt that if there were significant tendencies on the part of the research participants to reciprocate the affective responses of the confederates, then the validity of the statements and the procedure would again be supported. The results of analyses of both the ratings of the confederate and affectionate and aggressive responding of the actual

participant supported the validity of statements and the procedure. The results in all cases were highly significant and in the expected direction.

STUDY I

The purpose of Study I was to investigate the relationship between the sexual composition of a true interacting dyad (no confederates were used) and the affection and aggression expressed by that dyad. Three types of dyads were used; male-male, male-female, and female-female. Several writers have suggested that males reared in the American culture are generally less affectionate than their feminine counterparts (e.g. Bowlby, 1953). This tendency for males to be less affectionate is though by some to be even more evident when the male is interacting with another male (e.g. Jourrard, 1974). However, Davis, Rainey and Brock (1976) using the Brock Pleasure machine found that females were no more willing to pleasure another female than males were to pleasure another male. (The Brock Pleasure Machine involves the electro-mechanical administration of vibrations to the buttocks). While physical pleasuring and affectionate responding are not identical behaviors, the two social responses do seem to have some common features and the results of the Davis et al. study do not support the reasoning of Jourrard. The results of other research do support the positions of Jourrard and Bowlby. Rubin (1970) found that women were significantly more likely than men to speak of loving a same-sexed friend and Noller (1978) in studying children from a culture

somewhat similar to our own, found that young Austrailian boys received significantly less affection from their fathers than young Austrailian girls. The results of these latter studies and the compellingness of the positions of Bowlby, Jourrard, and of casual observations led the present authors to predict that male-male pairs would behave less affectionately than the other types of dyads.

Another purpose of Study I was to examine the relationship between affectionate responding and aggressive responding. This relationship is potentially an important one with Freud (1932) and others (e.g. Lorenz, 1966) suggesting that one important way of combating the expression of aggression is the development of affectionate ties among human beings. If this reasoning is accurate, then it seems that one should find a negative relationship between affectionate responding and aggressive responding. However, others (e.g. Pepitone, 1964) have suggested that affectionate responding and aggressive responding may represent independent processes. If this latter reasoning is correct then no correlation between the two response tendencies should be found. Relationships similar to the relationship between affection and aggression have been examined in a few studies. Baron (1971) and Hendrick and Taylor (1971), among others, have investigated the relationship between interpersonal attraction or liking and aggressive responding. However, the results of these studies have been mixed (Shuntich, 1976) and these investigations did not examine

The relationship between expression of affection that are directed toward a particular target and expressions of aggression directed toward that same target. For the present study, no predictions were made concerning the relationship between aggressive and affectionate responses.

Method

The participants of Study I were one hundred and eight college students of which one-half were males and they were randomly assigned to one of 54 dyads with the constraint that equal numbers of male-male, female-female, and male-female dyads were formed. Eighteen dyads of each type were created.

Each dyad was brought into the laboratory and the individuals met briefly before being escorted into separate rooms. In each experimental room was a 15-statement list consisting of five affectionate, five aggressive and five neutral statements. The affectionate and aggressive statements on each subject's list ranged from mild to moderate in intensity and although the specific statements were different for the two subjects, they were of comparable intensities. In each subject's room there was also a random access dial wired to a slide projector and a wall screen. Tape recorded instructions were played to both indivdiuals. The participants were informed that they were about to take part in an experiment involving communication processes. The instructions indicated that they would be exchanging statements or "messages" with one another.

This was to be accomplished by picking one of the 15 numbered statements on their lists and dialing the appropriate number of the random access dial. This would result in the statement being projected on a screen in the other person's room. The participants were informed that they were to take turns sending messages and that the experimenter would signal both the time when the message should be sent and the end of the series of exchanges. Each statement, when projected, would have its number appear below the statement which would allow the partner to determine the intensity of the statement. The were also told that when a neutral statement was projected an "N" would appear below the statement. After they heard these instructions, the two individuals engaged in 13 exchanges.

Results

Because the context in which the responses of the participants took place was interactive in nature, the dyadic response became the unit of analysis rather than the response of each participant.

Affection Data

The affectionate responses that occurred during the 13 exchanges were broken down into First Exchange affection and Block I and Block II affection with each block representing six exchanges. A one-way analysis of variance was performed on the frequency of affectionate responses that occurred during the first exchange for the male-male, male-female and female-female dyads. This analysis yielded no significant

results. A split-plot analysis of variance was performed on the frequency of affectionate responses made during the two six-exchange blocks. The between subjects variable was the sexual composition of the dyad and within the subjects variable was blocks of exchanges. This analysis yielded a significant F of 4.29 (df=1, 51, $p < .02$) for the sexual composition variable. There were no other significant effects with this analysis. The results of Duncan Range tests indicated that male-male pairs were significantly less affectionate ($p < .05$) than the other two types of dyads, which did not differ from one another. Analyses of variance were also performed on the intensity of affectionate responses. There were no significant first-trial effects, with this dependent variable. With the split-plot analysis the means favored female-female and male-female pairs over the male-male pairs, but this effect was not statistically significant (F=1.76, df=2, 51, $p < .19$). There was however, a significant block effect with all groups increasing the intensity of affection during the second block of trials (F=7.94, df=1, 51, $p < .01$).

The above analyses indicated that male-female dyads were as affectionate as female-female dyads when both frequency of affectionate responding and intensity of affectionate responding were considered. In order to determine the relative contributions of males and females to the total amount of affection observed in these dyads, the total number of affectionate "units" (frequency x intensity) that were produced

by these dyads was broken down into affectionate "units" sent by males and "units" sent by females. It was found that males were responsible for 54% of these units and females were responsible for 46% of these units. Thus, when interacting with a menber of the opposite sex, males were actually more affectionate (though not significantly so) than females.

Aggression data

Analyses of variance were also performed on the frequency and intensity of aggressive responses. Again both first trail and two block analyses were conducted. There were no significant first trial effects with either dependent variable. The results of the split-plot analyses indicated that male-male pairs tended to be the most aggressive of the dyads but these differences were not statistically significant for the frequency data ($F=1.88$, $df=2, 51$, $p < .17$) nor for the intensity data ($F-1.46$, $df=2, 51$, p=n.s.). With both frequency and intensity of aggressive responses as dependent variables, there was a significant tendency for participants to increase their aggressiveness during the second block of exchanges. The means for the frequency data were 1.63 for the first block and 2.37 for the second block ($F=6.16$, $df=1, 51$, $p < .02$) and respective means for the intensity data were 4.09 and 7.31 ($F=10.65$, $df=1, 51$, $p < .01$). No interaction effects were significant with these analyses.

The relationship between affection and aggression was also examined. Some unexpected relationships emerged as correlations between affectionate responding and aggressive

responding were computed. The overall correlation between the two tendencies (intensity of affectionate responses correlated with intensity of aggressive responses) was -.29 (n=108, $p < .01$) for all participants. [4] This correlation indicated that the affectionate person tended to be non-aggressive. When one examined this correlation for each sex separately it was found that the correlation for females was -.44 (n=54, $p < .001$) but only -.15 (n-54, p=n.s.) for males. Perhaps even more interesting were the correlations for the two sexes within the experimental groups. Then females were interacting with other females the correlation was -.48, (n=36, $p < .01$). However, when males were interacting with other males the correlation was but -.03 (n=36, p=n.s.). Thus, affectionate females when interacting with another female tended to be non-aggressive, while affectionate males when interacting with another male were much more variable in their aggressive responding. Affection-aggression correlations within the male-female dyad condition were: females = -.38(n=18, $p < .12$) and males =-.17(n=18, p = n.s.) These results are presented in Table II.

Insert Table II about here

The responses made after participants had received an affectionate response were also examined. Each person who received at least one affectionate response during

his or her interaction was included in this analysis. A percentage score was calculated for affection, neutrality and aggression based on the participant's response that immediately followed the receipt of each affectionate response. These percentage scores were subjected to analysis of variance and are presented in Table III. The first comparison involved females in female-female dyads and males in male-male dyads. Females responded to affection with affection 59% of the time, with neutrality 32% and with aggression 9% of the time. Comparable percentages for males in male-male dyads were 40%, 45%, and 15%. These differences were statistically significant for affection ($F=8.66$, $df=1, 69$, $p < .005$) and for neutrality ($F=4.35$, $df=1, 69$, $p < .05$) but not for aggression. The differences must be interpreted with caution in that individual percentages were analyzed and one could argue that these individual percentages scores do not represent truly independent observations because these responses were made in the context of a dyadic interaction. However, if one reduces the df by one-half the results of both of these analyses remain statistically significant.

The responses to affection in the male-female dyads were also analyzed. In these dyads, females responded to affection with affection in 54% of the instances, with neutrality 38% and with aggression 8%. Comparable figures for males were 66%, 19% and 15%. Only the percentages

for neutrality were statistically significant ($F=6.89$, $df=1, 34$, $p < .02$). With these analyses the lack of complete independence of observations factor would seem to make it more difficult to find significant differences.

Similar analyses were also conducted on the responses following the receipt of aggression. There were no significant differences between males in male-male dyads and females in female-female dyads with these analyses. The respective percentages for affection, neutrality and aggression in response to receiving aggression were 24%, 28 % and 48% for males and 28 % , 29 % and 43 % for females. The sexes differed more when interacting with one another, although these results were nonsignificant also. Respective mean percentages for males in male-female dyads for affection, neutrality and aggression were 51 % , 21 % and 28 % For females these percentages were 39.% , 11 % and 50 %. These percentages appear quite different for the two sexes but small n^s (M=12, F=11) and large variances were present in these analyses.

Insert Table III about here

Discussion

The results indicated that male-male pairs were significantly less affectionate than the other types of dyads which did not differ from each other. Thus, the results of this study partially support the reasoning of Jourrard (1974) and Bowlby (1953), both of whom suggest that males are less affectionate than females. The support

is only partial because a more detailed analysis indicated that males were not less affectionate than females under certain circumstances.It was found that when participants were interacting with a member of the opposite sex, males were actually more affectionate (though not significantly so) than females. In addition, the results indicated that males responded to an affectionate response from a female with affection at least as frequently as did females when they received an affectionate response from a male. This later finding suggests that males were as likely as females to encourage affection in the male-female dyads. Thus, while the results of the present study support the notion that males are less affectionate than females when interacting with a same-sexed person, the data do not support the contention that males are generally less affectionate than females.

Although males were as affectionate as females in the male-female dyads, they were clearly less affectionate than females when same-sex pairs were considered. Why should this be the case? One possible explanation is that these young men were concerned about the possibility that affectionate responding in the context of a male-male interaction would be interpreted as an indication of homosexual tendencies. Concerns about being perceived as homosexual may be greater for males than for females in our cluture (Morin, 1975) and males in the present study may have responded less affectionately in the same-sex

pairs to minimize these concerns. The fact that males in male-male dyads were less likely to follow an affectionate response with affection (40% of the time in male-male dyads compared to 59% of the time when interacting with a female) may be another reflection of the belief that affectionate responding in the context of a male-male interaction smacks of homosexuality. In this case the reciprocation of an affectionate response in and of itself could be "misinterpreted" and male participants may have also believed that such reciprocal responding would tend to encourage affectionate responding leading to higher and therefore more "uncomfortable" levels of affectionate expression.

The aggression data indicated that although male-male pairs displayed more aggression than the other pairs, they were not significantly more aggressive than the other dyads. These data parallel the results of other aggression studies in which verbal aggression was the dependent variable (Frodi, et al. 1977). The aggression data also indicated a statistically significant upward "drift" in aggressive responding over the two blocks of trials. This result also parallels the results of previous research, specifically studies using the Buss Aggression machine as the paradigm in which aggression is measured (e.g. Buss, 1966) and a study by Goldstein (1975) in which negative statements were used in a Buss-like situation.

The relationships between affectionate responding and aggressive responding that were found in the present

study were quite interesting. Women when interacting with other women showed the expected relationship with those behaving affectionately tending to behave non-aggressively. Men, on the other hand, showed no relationship between the two response tendencies when they interacted with other men. Correlations for individuals in mixed-sex dyads were less clear cut with both males and females showing negative, though non-significant, correlations between the two response tendencies. These results suggest that being affectionate to someone of the same sex has different implications for males and females as far as aggressing against that person in concerned. This is a provocative notion and in Study II the relationship between affection and aggression was explored again to see if the present findings would be replicated.

Study II

The major purpose of Study II was to examine the possibility of increasing the amount of affectionate responding in interacting dyads. Both casual observation and empirical work have indicated that confrontations with death of one kind or another are responded to with a myriad of emotions including, at times, increases in affection. The behaviors observed at funerals include attempts to comfort the bereaved, attempts which often seem to involve affection as an important component. Also, some individuals seem to have responded to a recent death by changing their general manner of interacting

with others such that they behave more affectionately. In a study of individuals with terminal illnesses and their spouses, Leiber (1976) found changes in intimate behaviors. Both patients with advanced cancer and their spouses indicated an increase in their desire for physical closeness (on measure of affection) and a decrease in their desire for sexual intercourse. In a study of military units stationed close to war zones, Teichman (1977) found that interpersonal relationships were characterized by heightened intimacy, a finding that had been reported earlier by others (see Stouffer, et al. 1949). The preceeding discussion suggests that a threat to our own longevity or the longevity of an intimate, or the actual death of an intimate may often be responded to with increases in affection. If this notion is true, then it is possible that even a less powerful and less personal "confrontation" with death and associated phenomena will be related to measurable changes in affectionate responding. This possibility was examined in Study II.

Exposing participants to the topic of death was accomplished by having them view a film which dramatized the accidental death of a young boy and the grieving of the boy's family. It was hypothesized that those participants who viewed the tragic death film would behave more affectionately than participants in the control groups.

Method

Subjects. Sixty-six undergraduate volunteers (27 males) were paired and assigned to three conditions: Tragic Death Film, Control Film and No Film Control. The assignment to conditions was random with the restrictions that nine male-male, nine male-female and 15 female-female pairs were formed and that equal numbers of male-male, male-female and female-female dyads were assigned to the three conditions.

Procedure. When the two individuals comprising a dyad arrived at the laboratory, they were escorted into a 12' x 15' room and seated in chairs. A four-foot long divider was positioned between the participants so that they could not see each other. A wall screen was situated 10 feet from the two individuals and a projector was located behind them. The participants read and signed consent forms and then, depending on the experimental conditon to which they had been assigned, they watched a film or read two articles from popular publications.

Participant pairs in the Tragic Death Film condition viewed a 20 minute, 16mm color film entitled "Where is Dead?". The film depicts the accidental death of a boy of about seven and the subsequent greiving of the boy's family which includes his parents, grandfather and a younger sister. The film is well done and quite moving.

Participant pairs in the Control Film condition viewed a 20 minute, 16mm color film entitled: "Ecology: Olympic Rain Forest". This film depicts a forest area in the state of Washington and includes scenes of wildlife, vegetation and flowers. Participant pairs in the No Film control condition read several pages of printed material for 20 minutes. This material was taken from Holiday and Time magazines and included articles on Manitoba and the Pioneer space probe. After the participants either viewed a film or read the travel material, they were given a mood scale to complete. The mood scale was comprised of 14 mood-related adjectives to be rated on seven-point Likert-type scales.

Once the mood scale was completed, the participants were escorted into a corridor, where a brief meeting of the participants took place, and then they were ushered into separate experimental rooms. Tape recorded instructions describing the "Communication Study" in which they were about to participate were then played. These instructions were identical to those used in Study I. The participants then engaged in the sending of messages and completed 13 "exchanges". After the exchanges were completed, the individuals were asked to complete a post-experimental questionnaire and then to record their names and addresses if they wished to receive a summary of the research results. Debriefing was unnecessary as no deception was involved.

Results

The responses to the mood questionnaire were subjected to analyses of variance. Significant differences were found among the three experimental groups on the following adjective dimensions: concerned, kindly, unhappy, bored, frustrated, sad, angry and affectionate. Duncan range tests indicated that participants in the Tragic Death Film condition rated themselves as being significantly more concerned, kindly, unhappy, sad, angry and affectionate that the participants in the other two conditions with the ratings associated with these latter two groups not differing from each other. The Control Film and No Film Control groups were significantly more bored than the Tragic Death Film group and did not differ from each other. The No Film Control group was significantly more frustrated than the Tragic Death Film group but did not differ from the Control Film group.

Affection Data. Split-plot analyses of variance (the 3 Film Conditions x 2- six trial block of exchanges) were performed on both the frequency of affectionate responses and the intensity of affectionate responses.[5] The dyadic response was once again the unit of analysis. There was a nearly statistically significant effect of Film Conditions with the frequency data ($F=2.65$, $df=2,30$ $p < .09$). This relationship was stronger and statistically significant with the intensity data ($F=4.39$, $df=2,30$,

$p < .03$). Duncan Range tests indicated that the Death Film condition was related to significantly more intense affectionate responding that the other two groups which did not differ from one another. There were no other significant effects with the affection data.

Aggression data. Split-plot analyses of variance were also performed on both the frequency and intensity of aggression responses for the dyads. With both of these dependent measures the Film Conditions effect approached but did not reach statistical significance. The F-value for film conditions with the frequency data was 2.67 ($df=2.30$, $p < .09$) and 2.11 ($df=2.30$, $p < .14$), with the intensity data. With both of these dependent variables the means for the Death Film and the No Film Control conditions were elevated while the means for the Control Film condition were depressed.

The relationship between affectionate responding and aggressive responding was also examined in this study. The correlation between the two tendencies for all participants was -.33 ($n=66$, $p < .01$). [6] In this study, correlations for males and females were nearly the same in all conditions ranging from -.35 to -.50 for males and -.25 to -.45 for females. Therefore, one relationship found in Study I, specifically that males, under certain circumstances exhibit different affection - aggression relationships than females, was not replicated in this second study.

The responses made following the receipt of an affectionate response from the partner were also examined. A pattern of results similar to that observed in Study I was found when responses to affection were analyzed for female-female dyads and male-male dyads. When interacting with another woman, females responded to affection with an average percentage of 58% for affection, 29% for neutrality and 13% for aggression. For males in male-male dyads the respective percentages were 41%, 35%, and 24%. Differences were nearly significant for the affection percentages ($p = .07$) and the aggression percentages ($p = .10$) but given the lack of complete independence of observations these findings are to be interpreted with a great deal of caution. More substantial differences were found when the responses to affection in the male-female dyads were examined. Females responded to the receipt of affection from a male with an average percentage of 35% for affection, 49% for neutrality and 16% for aggression. Comparable figures for males were 76%, 13% and 11%. These results were significant for the affection percentages ($F = 10.80$, $df = 1, 16$, $p < .005$) and the neutrality percentages ($F = 10.81$, $df = 1, 16$, $p < .005$).

Similar analyses were conducted on the responses following the receipt of aggression. As was the case in Study I no significant differences were found with these analyses. It is interesting to note, however, that in these analyses the combination most likely to result in an aggressive response involved a female receiving an

aggressive response from a male. Aggression was followed by aggression with an average rate of 60% in these cases. This was also the most "explosive" combination in Study I, although in neither case were the results statistically significant (small n^s and large variances were again problems in this study).

Discussion

The results of Study II indicated that an exposure to a dramatization of a tragic death may often by responded to with increases in affection. Why should this kind of experience lead to increases in affectionate behavior? Among the possible answers to this question is the notion that exposure to the depiction on another's death is responded to with a greater appreciation of others and perhaps of life itself which results in the viewer becoming more affectionate. A second possibility is that after the viewer has this kind of experience he/she feels guilty about social mistakes made in the past and responds more affectionately because of this guilt. A third possibility is that people feel psychologically "closer" or more similar to others after their awareness of death has been heightened because they are focusing on a feeling that is apparently common to most humans: a fear of death. This greater feeling of closeness or similarity may have led to greater liking and also greater expressions of affection.

General Discussion

The research reported in the present paper suggests that the procedure developed for the "simultaneous" study of affection and aggression can be used profitably to explore these social responses. While several of the findings were of interest to the present author, the relationship between affectionate responding and aggressive responding was particularly intriguing. In most cases, the correlation between these two response tendencies was negative and statistically significant. These correlations give rise to a speculation similar to that offered by Freud (1932) and others, namely, that the strengthening of affectionate "bonds" among people will actually lead to a decline of aggressive expression among these individuals. The correlations observed in the present research supports this notion but obviously much more needs to be done before the proposition is confirmed.

Table I

Statements on Lists A and B with mean intensity ratings on seven-point scale and percentage agreement as to statement type.

Affectionate Statements

List A

Statement	Mean Intensity Rating*	% Agreement as to type
I think you're OK	3.511	96.1%
I think you are pleasant	4.379	92 %
I admire you	5.350	97.8%
I'm very fond of you	5.800	98.1%
I care for you very much	6.343	93.2%

List B

I think you are sort of nice	3.338	82.7%
I think you are interesting	4.287	89.3%
I like you	5.313	98 %
I value you a great deal	5.765	93.5%
I like you very much	6.316	96 %

Aggressive Statements

List A

Statement	Mean Intensity Rating	% Agreement as to type
I don't think that you're great	3.713	91.3%
I'm not fond of you	4.141	90.3%
You're immature	4.577	91.3%
I really dislike you	5.069	98.1%
You're worthless	5.758	91 %

List B

I don't think that you're interesting	3.875	89.7%
I don't think that you're pleasant	4.268	91.3%
You irritate me	4.798	90.7%
You're obnoxious	5.271	91.3%
I can't stand you	5.784	92.6%

Neutral Statements

List A

Statement	% Agreement as to type
The speed of sound is 740 MPH	98
Helen Keller was born in 1880	97
Cats can hear higher pitched sounds than humans	92.3
A cacophony is a jarring sound	98.1
A young kangaroo is a joey	92

List B

An ostrich can weigh 345 pounds	94.3
Saturn has 10 moons	96.1
Paella is a Spanish rice dish	95.1
Hippocrates was born about 460 BC	91.2
Insouciant means carefree	92.9

* Higher numbers represent more intense ratings.

Table II

Correlations between Intensity of Affection and Intensity of Aggression

Group	n *	r	P-value
All Participants	108	-.29	p < .01
Females	54	-.44	p < .001
Males	54	-.15	p =.n.s.
Females in F-F Groups	36	-.48	p < .01
Males in M-M Groups	36	-.03	p =.n.s.
Females in M-F Groups	18	-.38	p < .12
Males in M-F Groups	18	-.17	p =n.s.

* It is important to note that these n's do not represent completely independent observations in that the unit of analysis is the pattern of responding of each participant and not each dyad. Thus, these correlations should be interpreted with some caution.

Table III

Mean Percentages of Affectionate, Neutral and Aggressive Responses Made in Response to the Receipt of Affection and Aggression.

Response to Receipt of Affection			
Participants	Affection	Neutrality	Aggression
Females in F-F dyads	59%	32%	9%
Males in M-M dyads	40%	45%	15%
Percentage difference	19%**	13%*	6%
Females in M-F dyads	54%	38%	8%
Males in M-F dyads	66%	19%	15%
Percentage difference	12%	19%*	7%

Response to Receipt of Aggression			
Participants	Affection	Neutrality	Aggression
Females in F-F dyads	24%	28%	48%
Males in M-M dyads	28%	29%	43%
Percentages difference	4%	1%	5%
Females in M-F dyads	39%	11%	50%
Males in M-F dyads	51%	21%	28%
Percentage difference	12%	10%	22%

* = $p < .05$ ** = $p < .01$

Footnotes

[1]A study by Goldstein, Davis and Herman (1975) had a somewhat similar design in that positive and negative verbal statements were used in experiments that focused on the escalation of aggression. The methodology used in the present study differed from that used in the Goldstein et al. study in two major ways. In the Goldstein et al. study the research participant was permitted to respond with one kind of statement (positive or negative depending upon experimental condition) rather than three and the situation was not interactive in that the recipient of these statements did not make replies to the participant.

[2]Only the ratings of those that rated the statement as being the same <u>type</u> on the two occasions were included in these analyses.

[3]The procedure of the present research involved a set of instructions which were played to the participants. These instructions described the statements as being arranged in an order in increasing intensity which reflected the intensity ratings of the statements made by other college students. Each statement also had a number beside it which labeled the statement as more or less intense that the other statements on the list. This procedure should have encouraged the participants to

view the statements as differing in intensity and as having only one appropriate heriarchial arrangement.

[4]These n's do not represent completely independent observations in that the unit of analysis is the pattern of responding of each participant and not each dyad. Therefore, these correlations should be interpreted with caution. Correlations based upon the dyadic response were: all participants: -.28 ($n=54$, $p < .05$), male-male: -.02 ($n=18$, p=n.s.) female-female: -.43($n=18$, $p < .08$), male-female: -.35 ($n=18$, $p < 16$).

[5]Analyses of variance were also conducted on the first trial affectionate and aggressive responses. No significant first trial effects were found with any of these analyses.

[6]These correlations are based on the responses of each participant rather than the dyad. Correlations based upon the dyadic response were: all participants: -.28 ($n=33$, $p < .12$), male-male: -.20 ($n=9$, p=n.s.), female-female: -.25 ($n=14$, p=n.s.) and male-female: -.39 ($n=9$, p=n.s.).

References

Acker, L.E., Acker, M.A., Pearson, D. Generalized imitative affection: Relationship to prior kinds of imitation training. Journal of Experimental Child Psychology, 1973, 16(1), 111-125.

Baron, R.A. Aggression as a function of a magnitude of victim's pain cues, level of prior anger arousal and aggressor victim similarity. Journal of Personality and Social Psychology, 1971, 18, 48-54.

Bowlby, J. Maternal Care and the Growth of Love. London, Penguin 1953.

Bowlby, J. Attachment and Loss V.3 Loss-Sadness and Depression. London, Hagarth Press, 1980.

Buss, A.H. The psychology of aggression. New York: Wiley, 1961.

Buss, A.H. Instrumentality of aggression, feedback, and frustration as determinants of physical aggression. Journal of Personality and Social Psychology, 1966, 3, 153-162.

Byrne, D. The attraction paradigm. New York: Academic Press,1971.

Davis, D., Rainey, H.B., Brock, T.C. Interpersonal physical pleasuring: Effects of sex combinations, recipient attributes, and anticipated future interaction. Journal of Personality and Social Psychology, 1976, 33(1), 89-106.

Festinger, L., Schachter, S., & Black, K. Social pressures in informal groups: A study of a housing community. New York: Harper, 1950.

Fiore, A., Swensen, C.H. Analysis of love relationships in functional and dysfunctional marriages. Psychological Reports. 1977, 40(3pt.1) 707-714.

Freud, S. Inhibitions, Symptoms and Anxiety. In Standard edition, Vol. 20., London: Hogarth Press, 1959, p. 143 (First German Edition, 1926).

Freud, S. Why War? In J. Strachey (Ed.), Collected papers. Vol. 5, London: Hogarth Press, 1950, p. 284. (first published in 1932).

Frodi, A., Macaulay, J. & Thome, P.R. Are women always less aggressive than men? A review of the experimental literature. Psychological Bulletin, 1977, 84, 634-660.

Fromm, E. The Sane Society, New York: Holt, Rinehart, and Winston, 1955.

Fryrear, J.L., Thelen, M.H. Effect of sex of model and sex of observer on the imitation of affectionate behavior. Developmental Psychology, 1969, 1(3) 298.

Goldstein, J.H., Davis, R.W., Herman, D. Escalation of Aggression: Experimental Studies. Journal of Personality and Social Psychology, 1975, 31(1) 162-170.

Hendrick, C., & Taylor, S.P. Effects of belief similarity and aggression on attraction and counter aggression. Journal of Personality and Social Psychology, 1971, 17, 342-349.

Jourrard, S.M. Healthy Personality: An approach from the viewpoint of humanistic psychology. New York: MacMillan, 1974.

Karst, T. The imitation of Aggressive and Affectionate-affiliative behavior as a function of children's personality characteristics. Dissertation Abstracts, 1967, 27(9-A), 3121-3122.

Leiber, L., Plumb, M.M., Gerstenzang, M.L., & Holland, J. The communication of affection between cancer patients and their spouses. Psychosomatic Medicine, 1976, 38(6) 379-389.

Lorenz, K. On Aggression. New York: Harcourt Brace and World, 1966.

Martin, P.J., Sterne, A.L., Karwich, G.A. Affection for patients as a factor in therapists outcome judgments. Journal of Clinical Psychology, 1976, 32(4), 867-871.

Maslow, A.H. Motivation and Personality. New York: Harper 1954, 1970.

Morin, S.F. Attitudes toward homosexuality and social distance. Paper presented at the meeting of American Psychological Association, Chicago, September, 1975.

Noller, P. Sex differences in the socialization of affectionate expression. Developmental Psychology, 1978, 14(3) Pgs. 317-319.

Pepitone, A. Attraction and Hostility. New York: Atherton, 1964.

Rotter, J.B. Chance, J.E. & Phares, E.J. Applications of a Social Learning Theory of Personality. New York: Holt, Rinehart and Winston, 1972.

Rubin, Z. Measurement of romantic love. Journal of Personality and Social Psychology, 1970, 16, 265-273.

Shuntich, R.J. Some effects of attitudinal similarity and exposure of attraction and aggression. Journal of Research in Personality, 1976, 10, 155-165.

Stouffer, S.A., Lumsdaine, A.A., Lumsdaine, M.H., Williams, R.M., Smith, M.D., Janis, I.L., Star, S.A., Cottrell, L.S. The American Soldier: Combat and its Aftermath. Princeton, Princeton University Press, 1949.

Taylor, S.P., Epstein, S. Aggression as a function of the interaction of sex of the aggressor and sex of the victim. Journal of Personality, 1967, 35, 297-310.

Teichman, M. Affiliative behaviors among soldiers during war-time. British Journal of Social & Clinical Psychology, 1977, 16(1), 3-7.